
XVIII. *Description of a new British Rubus, with Corrections of the Descriptions of Rubus corylifolius and fruticosus; and a List of some of the more rare British Plants.* By George Anderson, Esq. F. L. S.

Read April 20, and May 4, 1813.

THE study of Botany in this country, with a few eminent exceptions, seems of late years to be chiefly directed to the investigation of our own native productions; at least we must own that the spirit for importing new foreign plants, and for keeping up and increasing our collection of exotics, if it has not declined, does not keep pace with the increasing wealth and power of the country, or with the rank it holds among European nations. And although the lovers of Botany have to acknowledge the liberal patronage of some individuals of high rank, still they have cause of regret in finding the number among the rich and great, who give encouragement to the advancement of knowledge in Exotic Botany, so limited as it is.

Our much respected Ray was among the first who introduced a taste for inquiry into the indigenous plants of England; and from his time the fashion for this branch has gradually and progressively increased as a favourite object of pursuit down to the present day, in which we see it so industriously followed by a great number of good botanists; and so greatly has the spirit for discovery prompted us, that one would think there was scarcely a hill or a rock in the kingdom left unexplored, were it not for the
fresh

fresh discoveries almost daily made. The accession of new species to our catalogue, even since the days of Hudson, is indeed truly surprising to ourselves; how much more remarkable must it be to the foreign botanist to observe how large a share of the plants hitherto known inhabits so small a portion of the globe as the British isles! What a store of unknown treasures may other countries still possess, when our little spot, through careful examination, is found to furnish so numerous a list of vegetable productions!

I have been slow in bringing forward the plant, of which I now beg leave to offer an account, to the Linnean Society; having waited till I had known and cultivated it for several years, and found it wild in most of the hilly regions of the kingdom; nor do I even yet venture to pronounce it undoubtedly a permanent and unchangeable species. Contenting myself with describing the plant as it has been found and continued unaltered, I shall leave it for future investigators, who may think it worth their while to examine and decide whether the account I give of it remain steady or not.

In many of the genera which comprehend numerous species, an accurate observer will discover a closer alliance to exist between two or more of those species, than does between them and any others in the same family. These inferior divisions of the genus are for the most part the produce of late years, and have chiefly arisen out of the improvement or refinement of the science since the writings of Linné; being, in the greater number of instances, comprehended under one species by him. The *Rubus corylifolius* of Smith, &c. was not distinguished by the writers of those days from *R. fruticosus*, though it seems not to have been overlooked by the accurate Ray about 100 years ago. The plant described below is another branch from the same stock,
but

but has not been observed till now by any botanist in this, or, as far as I can discover, in any other country, with the exception of the quotation below. Though materially different from each other, they are all three nevertheless more nearly connected together than any of them are to the *Rubus cæsius* on the one side, or *idaeus* on the other, the two species between which they stand. I have patiently examined them in their different stages, to fix permanent and scientific marks of distinction to characterize them; and in this attempt have endeavoured to improve the descriptions of the two species already defined by Dr. Smith, having his judicious remarks to guide me, and such further aid as a constant view of the plants for several years has afforded me.

1. *RUBUS suberectus.*

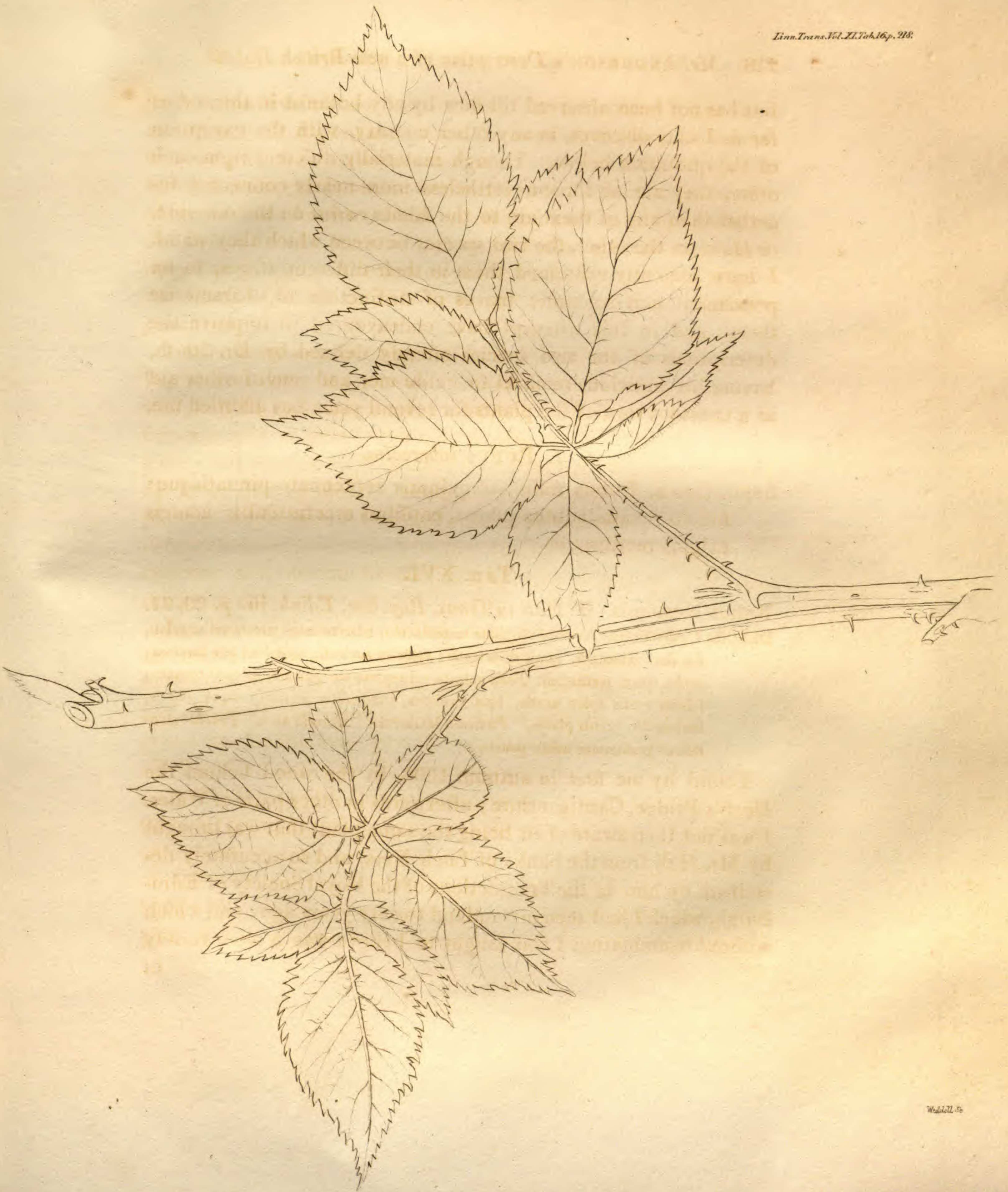
SPEC. CHAR. *Rubus* foliis subquinatis septennato-pinnatisque: foliolis ovatis subtus pilosis, caulibus erectiusculis: aculeis exiguis rectiusculis.

TAB. XVI.

Rubus Nessensis. *W. Hall in Trans. Roy. Soc. Edinb.* iii. p. 20, 21.

DESCR. Caules biennes erectiusculi, (sine sustentaculo) adscendentes teretes vel angulati, fragiles, rubicundi, ramis divaricatis; sparsim aculeati, interdum fere inermes; aculei breves rectiusculi. *Folia* quinata vel septennato-pinnata, subinde ternata; foliolis ovatis apice acutis, læte viridibus, inæqualiter serratis; supra glabris, læviusculis, subtus pilosis. *Panicula* laxiuscula. *Corolla* alba. *Fructus* atrorubens gratissimus acinis paucis.

Found by me first in autumn 1808, in the wood behind the Devil's Bridge, Cardiganshire; afterwards in other parts of Wales. I was not then aware of its being the same plant that was brought by Mr. Hall from the banks of Loch Ness, and so accurately described by him in the Transactions of the Royal Society of Edinburgh, which I had seen in Scotland twenty years ago; and which without examination I was taught to believe was a mere variety of



of *Rubus fruticosus*. I discovered it a second time in 1811, in Dallow Gill, near Ripley, Yorkshire; and again last autumn in the Highlands of Aberdeen and Perthshire in great abundance and variety: I also brought a plant of it from the garden of the indefatigable Don, at Forfar, three years ago, which is now alive in my garden at West Ham, along with other plants of it from Aberdeenshire. Don found it on the hills of Forfarshire. I find a specimen of it in the Banksian Herbarium, sent from four miles north-west from Manchester; so that I have reason to believe it is not of rare occurrence, growing chiefly among loose stones, by way sides, or at the foot of rocks in upland exposed situations.

The habit of the plant approaches nearest to that of *R. corylifolius*, with which it is frequently intermixed in those districts, in the same way as the latter is found with *R. fruticosus* in the neighbourhood of London. It differs in being more upright in its branches; in the leaves having often seven leaflets, (never the case with the other two,) which are generally more acuminate, and smoother on the upper surface; the undermost and uppermost pair sessile; in the aculei being more rare and shorter; and in the fruit being dark red, not dark purple. Its taste resembles a little that of *R. idæus*. It perhaps might not be unworthy of cultivation, as its period of ripening is later than that of the raspberry. The whole plant bears in general a darker hue than that of *R. corylifolius*.

The impropriety of Mr. Hall's specific name will I hope be a sufficient excuse for my changing it; the plant having never yet appeared under it in any botanical work.

2. *RUBUS corylifolius.*

SPEC. CHAR. *Rubus* foliis subquinatis: foliolis ovatis subtus pilosis, caulibus teretiusculis diffusis promiscue aculeatis: aculeis rectiusculis.

SYN. *Rubus corylifolius*. *Smith Flo. Brit.* 542. *Relhan, Cant.*
ed. 2. 195. *Eng. Bot.* 827; a good figure.

R. fruticosus major. *With. ed.* 3. p. 469.

R. major fructu nigro. *Schmidel Ic. tom.* 8; an excellent figure.

DESCR. Caules biennes, longissimi, flagelliformes, diffusi, procumbentes, vel per dumeta aut sepes sustentati, fragiles et spongiosi, rubicundi, teretiusculi, raro subangulati, extremitatibus radicanibus; ubique aculeati, aculeis inæqualibus, gracilibus, rectiusculis. *Folia* ternata vel quinata; foliolis late ovatis, planiusculis, rugosis; nervis aculeatis, undique pilosis, subtus mollibus, inæqualiter serratis. *Petioli* aculeati, imis brevissimis. *Panicula* laxiuscula. *Corolla* alba. *Fructus* atro-violaceus hemisphæricus vel difformis grate acidus; acinis paucis, magnis, rotundatis. *Calix* fructus reflexus.

Common among ditches and sides of fields about London, and indeed all over the island, trailing along the ground, though sometimes arching upwards; and when supported by a hedge or pollard, will grow to a great height. I have seen shoots of it in such situations eighteen or twenty feet high. Dr. Smith, in *English Botany*, has corrected one mistake that crept into *Flora Britannica* from misinformation; but has left another still undetected; the leaflets being all petiolated, although the lowermost pair are much shorter in the petioles than those of *R. fruticosus*; and the calyx of the fruit is reflexed as in *fruticosus*, but larger. Indeed the whole of Mr. Wigg's original description seems to refer to another plant very common also about London, but not yet separated from *R. cæsius*, though apparently very distinct from it. I brought this last-mentioned plant four years ago from Charlton Wood, and have cultivated it ever since in my garden in company with the true *cæsius*. I have since found it to be very common at the edges of cultivated fields in Essex, with long trailing shoots quite cylindrical; its leaves as often of five leaflets as three, and the undermost pair of the five quite sessile, and with the calyx inflexed.

The only steady scientific mark of distinction between the present plant and *R. fruticosus*, that will carry the observer fairly through the many varieties of each species, notwithstanding their general appearance being so dissimilar, is that of the shoots of *R. fruticosus* being constantly placed on the *ridge* of the angle or furrow; whereas those of *R. corylifolius*, besides being more slender, more numerous, and of irregular size, are indiscriminately scattered all over the shoot, which is generally round, rarely angled, and more spongy and brittle than in *fruticosus*.

The panicle of *R. corylifolius* is also more diffuse; fruit not so numerous, hemispherical, acini larger, fewer in number, and more distinct, not crowded together and flattened on the surface as if pressed down by a plane, as is the case with *R. fruticosus*.

The aculei of *R. corylifolius* are generally straight, not hooked as in *fruticosus*; but this distinction is not invariably preserved by either species.

Relhan's remark of this species (*flagellis non radicanibus*) is by no means correct; the tips of the shoots are prone to take root in common with those of *R. fruticosus*, and indeed every other woody British species, except *sub-erectus* and *idæus*.

3. RUBUS *fruticosus*.

SPEC. CHAR. Rubus foliis subquinatis: foliolis petiolatis subtus cæσιο-tomentosis, angulis caulium aculeatis: aculeis aduncis. Rubus fruticosus. *With.* 469. *Smith Flo. Brit.* 543. *Relhan, ed. 2. p.* 195. *Eng. Bot.* 715; an excellent figure.

DESCR. Caules bi- vel triennes 4- ad 6-pedales lignosi, fortes, arcuati, divaricati, interdum ad humum deflexi, hinc radicanes; tenaces, præcipue angulato-sulcati, angulis aculeatis, (sulcis intermediis semper inermibus) aculeis caulium basi dilatatis seu compresso-conicis, subaduncis; pedunculorum et foliorum plane aduncis: rami annotini cæσιο-rubicundi. *Folia* quinata vel ternata; foliola omnia petiolata, petiolis aculeatis; anguste ovata, seu elliptica, basi præcipue an-

gustata, apice obtusa cum acumine, inæqualiter serrata, raro incisa, scabro-rugosa, supra convexa, subnuda, saturate viridia; subtus cano-tomentosa, nervis aculeatis. *Panicula* subracemosa multiflora, calyx fructus reflexus marcescens. *Corolla* rosea, raro alba. *Fructus* atro-violaceus, subdulcis, orbiculatus, acinis numerosis, confertis, seu connato-compressis.

Common in ditches and on way-sides about London, but seems to prevail less in the northern parts of the kingdom. It was no where to be found by me in Aberdeenshire or Perthshire, giving place as a companion to *corylifolius*, in those counties, to *R. sub-erectus*. This is by far the most robust of the three species, though not so uniformly upright as *sub-erectus*, throwing up long, vigorous, arched, tough branches, seldom trailing on the ground as in the preceding species; armed with terrible prickles, proportionate in size to the branches, dilated at the base, firmly fixed on the shoot, and for the most part hooked; particularly those of the minor branches and petioles.

Leaflets narrower and much less pubescent, with longer petioles, clothed underneath with an imperceptible hoary down, that gives it a whitish appearance (though it varies in this particular, for I have seen plants with leaves nearly equally green on both sides). Convex or rounded on the upper surface, and doubly or irregularly serrated, but more entire as well as more attenuated at the base than in the preceding plant.

The leaves of this species have a tendency to remain all winter on the branches, and seem more frequently quinate than ternate; those of *corylifolius*, on the contrary, more ternate than quinate, and drop off in the autumn, excepting in shady situations.

This species and *R. corylifolius* are subject to vary widely: the above remarks must therefore be viewed on a general scale; the only constant mark of distinction yet discovered being in the situation of the prickles, as mentioned in describing the foregoing species,

The difficulty that has hitherto attended their discrimination will, I trust, be an apology for my giving such minute descriptions of plants so very common as the two last; and I have thought it necessary to accompany this with a drawing of the shoot and leaf of *suberectus*. Tab. XVI.

I shall conclude these remarks by subjoining a list of the places of growth hitherto unrecorded of a few British plants which I have fallen in with in my late excursions. It may prove not unacceptable to some of the members of the Society.

Arabis hispida, var. *hastulata*, on the banks of the Dee, Aberdeenshire.

Meum athamanticum, do.

Festuca bromoides, abundant about Aberdeen and the banks of the Dee.

Prunus Padus, all along the banks of the Dee, and very common in Yorkshire.

Rosa rubiginosa, on the banks of the Dee, undoubtedly wild.

— *caesia*, on the banks of the Den of Lawers, Perthshire, and many other parts of that county.

— *mollis*, *E. Bot.*, on the banks of the Dee; on Strath Avon, Banffshire; and near Durness, Sutherland. When I found this and the preceding, I was not aware that they had been previously published; and it is gratifying to find that, on comparing my descriptions of them made upon the spot, under the conviction of their being non-descript species, with those in *English Botany*, they correspond in almost every particular.

— , a plant very common along the banks of Dee, the Tilt, Tummel, Lochs Tay and Rannoch; allied to *villosa*, indeed

indeed I have little doubt of its being only a variety of that species with smooth capsules.

Rosa rubella, *Eng. Bot.* 2459, on the banks of Dee, about Abergeldy. I took this for a new species when on the spot, but afterwards concluded it was only a dwarf red-fruited variety of *R. spinosissima*.

Pyrethrum maritimum, sea-shores about Aberdeen.

Carex pulla, banks of the Tilt, Perthshire.

Gnaphalium supinum, Glen Dee.

Juncus trifidus, on Bræ Riach, at the head of Dee.

Stellaria cerastoides, on Cairn Toule, do.

Veronica alpina, do. do.

Eriophorum capitatum *Eng. Bot.* 2387? Is this Schrader's plant?

Senecio sarracenicus, on the banks of the Eningteer, a tributary to the Don, Aberdeenshire.

Carduus heterophyllus, on the river Galater, head of Dee, Ben Clibrig, Sutherland.

Berberis vulgaris, at the lower end of Loch Tay.

Serratula alpina, Craig Cailloch, Perthshire, Ben Clibrig.

Thalictrum majus, banks of Loch Tay and Loch Rannoch; the roots of this species are remarkably yellow.

Vicia sylvatica, banks of Loch Rannoch.

Geranium sanguineum, do.

Myosotis alpina? a perennial on Ben Lawers, with exquisitely bright blue flowers, nearest allied to *M. palustris*, *Eng. Bot.*

Arbutus alpina, supplies the place that *A. Uva-ursi* generally has, on almost all the high mountains of Sutherland.

Draba incana, *Eng. Bot.* at Durness, Sutherland, and on Ben Lawers; the figure in *English Botany* is of an unusually luxuriant specimen.

Linnea borealis, discovered (but not by me) in fir woods at Craibstone,

stone, about six miles from Aberdeen; this is the third station in which it has been found thereabouts, to my knowledge.

Epilobium angustifolium, Ben Clibrig, Sutherland, banks of the Tilt, Spey and Dee. The beautiful banks of Loch Lubnaig, Perthshire, are red with its flowers. It seems very common in most alpine situations.

Spiræa salicifolia, sides of fields about Pitcaithly, Perthshire, and in woods on the banks of Alt-Graad, Frith of Cromarty.

Tormentilla reptans. I brought a plant from Wales four years ago, and have cultivated it ever since in my garden; it flowers with four and five petals promiscuously, and seems equally akin to this and *Potentilla reptans*.

Sedum rupestre. It was suspected that *S. Forsterianum* would supplant this species as a Welsh plant; but I found the true *Sedum rupestre* on rocks behind Tre-Madock, North Wales. I have also found it on Chedder cliffs, and on rocks near the sea, south of Minehead, Somerset; in all which places I also gathered *S. Forsterianum*.

Vinca minor. I cannot help differing with Dr. Smith, who thinks this the more rare species of the two, as I have found it truly wild in Wiltshire, and near Copthorne Common, Sussex; also in woods near Chisselhurst, and near Wrotham, Kent; whereas I have never seen *V. major* but in suspicious places, though frequently to be seen in hedges in the vicinity of cottages: indeed I consider it quite a doubtful native.

Fucus Mackaii, Turner's Fuci, No. 52. *Eng. Bot.* 1927; discovered in 1809 by me in the sea lakes, Loch Laxford and Loch Inchard, Sutherland, floating on the surface of the water in great abundance. This I believe is the only instance of that species being found in Britain.